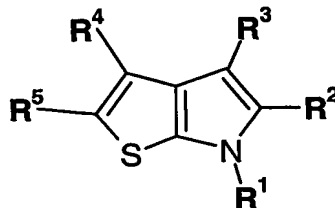


CLAIMS:

1. A compound of Formula (I),



Formula (I)

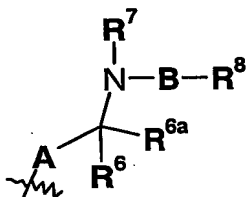
wherein

R^1 is selected from: hydrogen, optionally-substituted C_{1-6} alkyl, optionally substituted

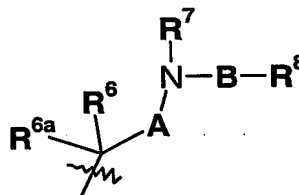
C_{1-6} alkanoyl, optionally substituted aryl or optionally-substituted aryl C_{1-6} alkyl;

R^2 is an optionally-substituted mono or bi-cyclic aromatic ring;

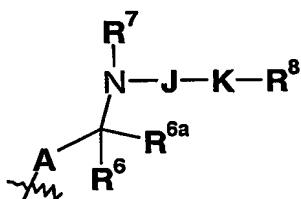
R^3 is selected from a group of Formula (IIa) to Formula (IIf):



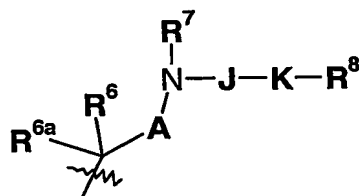
Formula (IIa)



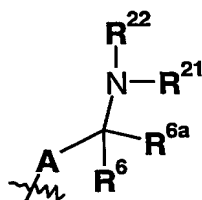
Formula (IIb)



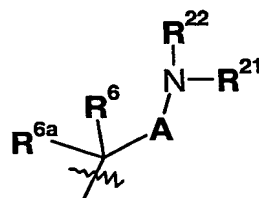
Formula (IIc)



Formula (IId)



Formula (IIe)



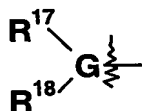
Formula (IIf)

R^4 is selected from: hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted aryl, C_{1-3} perfluoroalkyl, cyano, nitro, halo, $R^9O(CH_2)_m$ -, $R^9C(O)N(R^{10})$ -,

$R^9R^{10}NC(O)N(R^{10})(CH_2)_m$ -, $R^9S(O_n)(CH_2)_m$ - or $R^9R^{10}NC(O)-(CR^9R^{10})_l(CH_2)_m$;

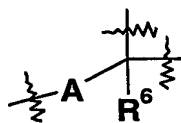
- 198 -

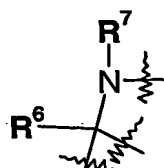
R^5 is a group of Formula (III):



Formula (III)

5 R^6 and R^{6a} are independently selected from hydrogen, fluoro, optionally substituted C_{1-6} alkyl, optionally-substituted aryl or optionally substituted aryl C_{1-6} alkyl, or R^6 and R^{6a} taken together and the carbon atom to which they are attached form a carbocyclic ring of 3-7 atoms, or R^6 and R^{6a} taken together and the carbon atom to which they are attached form a carbonyl group;

10 or when A is not a direct bond the group  forms a carbocyclic ring of 3-7 carbon atoms or a heterocyclic ring containing one or more heteroatoms;

or the group  forms a heterocyclic ring containing 3-7 carbon atoms and one or more heteroatoms;

15 R^7 is selected from: hydrogen, optionally-substituted C_{1-6} alkyl, optionally-substituted aryl C_{1-6} alkyl, optionally-substituted aryl, optionally substituted heterocyclyl, optionally substituted heterocyclyl C_{1-6} alkyl, R^9OC_{1-6} alkyl-, $R^9R^{10}NC_{1-6}$ alkyl-, $R^9R^{10}NC(O)C_{1-6}$ alkyl-, $-C(NR^9R^{10})=NH$;

or when R^3 is a group of Formula (IIc) or (IId) R^7 is of the formula $-J-K-R^8$;

R^8 is selected from:

20 (i) hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, halo C_{1-6} alkyl, C_{1-4} alkoxy C_{1-4} alkyl, hydroxy, hydroxy C_{1-6} alkyl, cyano, $N-C_{1-4}$ alkylamino, N,N -di- C_{1-4} alkylamino, C_{1-6} alkyl- $S(O)_n$ -, $-O-R^b$, $-NR^bR^c$, $-C(O)-R^b$, $-C(O)O-R^b$, $-CONR^bR^c$, $NH-C(O)-R^b$ or $-S(O)_nNR^bR^c$,
 25 where R^b and R^c are independently selected from hydrogen and C_{1-4} alkyl optionally substituted with hydroxy, amino, $N-C_{1-4}$ alkylamino, N,N -di- C_{1-4} alkylamino, $HO-C_{2-4}$ alkyl-NH- or $HO-C_{2-4}$ alkyl-N(C_{1-4} alkyl)-;

- 199 -

(ii) nitro when **B** is a group of Formula (IV) and **X** is CH and **p** is 0;

(iii) C₃₋₇cycloalkyl, aryl or arylC₁₋₆alkyl each of which is optionally substituted by **R**¹², **R**¹³ and **R**¹⁴;

(iv) -(Q)-aryl, -(Q)-heterocyclyl, -aryl-(Q)-aryl, each of which is optionally substituted by **R**¹², **R**¹³ and **R**¹⁴

wherein -(Q)- is selected from **E**, **F** or a direct bond;

(v) heterocyclyl or heterocyclylC₁₋₆alkyl each of which is optionally substituted by up to 4 substituents independently selected from **R**¹², **R**¹³ and **R**¹⁴;

(vi) a group selected from **R**¹², **R**¹³ and **R**¹⁴;

R⁹ and **R**¹⁰ are independently selected from: hydrogen, hydroxy, optionally substituted C₁₋₆alkyl, optionally substituted aryl, optionally substituted arylC₁₋₆alkyl, an optionally substituted carbocyclic ring of 3-7 atoms, optionally substituted heterocyclyl, optionally substituted heterocyclylC₁₋₆alkyl or **R**⁹ and **R**¹⁰ taken together can form an optionally substituted ring of 3-9 atoms or **R**⁹ and **R**¹⁰ taken together with the carbon atom to which they are attached form a carbonyl group;

R¹¹ is selected from: hydrogen, optionally substituted C₁₋₆alkyl, or N(**R**⁹**R**¹⁰);

R¹² is selected from: hydrogen, hydroxy, **R**¹⁷**R**¹⁸N(CH₂)_{cc}-, **R**¹⁷**R**¹⁸NC(O)(CH₂)_{cc}-,

optionally substituted C₁₋₆alkyl- C(O)N(**R**⁹)(CH₂)_{cc}-, optionally substituted C₁₋₆alkyl-SO₂N(**R**⁹)-, optionally substituted aryl-SO₂N(**R**⁹)-,

C₁₋₃perfluoroalkyl-SO₂N(**R**⁹)-, optionally substituted C₁₋₆alkyl-N(**R**⁹)SO₂-,

optionally substituted aryl-N(**R**⁹)SO₂-, C₁₋₃perfluoroalkyl-N(**R**⁹)SO₂- optionally substituted C₁₋₆alkanoyl-N(**R**⁹)SO₂-, optionally substituted aryl-C(O)N(**R**⁹)SO₂-,

optionally substituted C₁₋₆alkyl-S(O_n) -, optionally substituted aryl-S(O_n) -,

C₁₋₃perfluoroalkyl-, C₁₋₃perfluoroalkoxy, optionally substituted C₁₋₆alkoxy, carboxy, halo, nitro or cyano;

R¹³ and **R**¹⁴ are independently selected from: hydrogen, hydroxy, oxo, optionally substituted C₁₋₆alkyl, optionally substituted C₁₋₆alkanoyl, optionally substituted

C₂₋₆alkenyl, cyano, nitro, C₁₋₃perfluoroalkyl-, C₁₋₃perfluoroalkoxy, optionally

substituted aryl, optionally substituted arylC₁₋₆alkyl, **R**⁹O(CH₂)_s-, **R**⁹(O)O(CH₂)_s-,

R⁹OC(O)(CH₂)_s-, **R**¹⁶S(O_n)(CH₂)_s-, **R**⁹**R**¹⁰NC(O)(CH₂)_s- or halo;

- 200 -

R¹⁵ is selected from: hydrogen, optionally substituted C₁₋₆alkyl, **R¹⁹OC(O)-**,
R⁹R¹⁰NC(O)-, **R⁹C(O)-**, **R⁹S(O_n)-**;

R¹⁶ is selected from: hydrogen, C₁₋₆alkyl, C₁₋₃perfluoroalkyl or optionally-substituted aryl;

5 **R¹⁷** is independently selected from: hydrogen, hydroxy, cyano or optionally substituted C₁₋₆alkyl;

R¹⁸ is a group of formula **R^{18a}-C(R⁹R¹⁰)₀₋₁-** wherein **R^{18a}** is selected from:

10 **R¹⁹OC(O)-**, **R⁹R¹⁰NC(O)-**, **R⁹R¹⁰N-**, **R⁹C(O)-**, **R⁹C(O)N(R¹⁰)-**, **R⁹R¹⁰NC(O)-**,
R⁹R¹⁰NC(O)N(R¹⁰)-, **R⁹SO₂N(R¹⁰)-**, **R⁹R¹⁰NSO₂N(R¹⁰)-**, **R⁹C(O)O-**, **R⁹OC(O)-**,
R⁹R¹⁰NC(O)O-, **R⁹O-**, **R⁹S(O_n)-**, **R⁹R¹⁰NS(O_n)-**, hydrogen, optionally substituted C₁₋₆alkyl, optionally substituted heterocyclyl;
or **R¹⁷** and **R¹⁸** when taken together form an optionally substituted carbocyclic ring of 3-7 atoms or optionally substituted heterocyclyl;

15 **R¹⁹** is selected from: hydrogen, optionally substituted C₁₋₆alkyl, optionally substituted aryl, optionally substituted arylC₁₋₆alkyl, optionally substituted C₃₋₇cycloalkyl, optionally substituted heterocyclyl or optionally substituted heterocyclylC₁₋₆alkyl;

R²⁰ is selected from **R¹²** or **R¹³**;

20 **R²¹** and **R²²** are independently selected from hydrogen, optionally substituted C₁₋₆alkyl, optionally substituted C₃₋₇cycloalkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylC₁₋₆alkyl, optionally substituted C₃₋₆alkenyl, optionally substituted C₃₋₆alkynyl, **-(C₁₋₅alkyl)_{aa}-S(O_n)-(C₁₋₅alkyl)_{bb}-**;
R⁹R¹⁰NC₂₋₆alkyl, **R⁹OC₂₋₆alkyl** or **R⁹R¹⁰NC(O)C₂₋₆alkyl**, with the proviso that **R⁹** and **R¹⁰** independently or taken together are not optionally substituted aryl or optionally substituted arylC₁₋₆alkyl; or

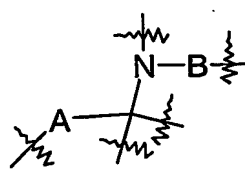
25 **R²¹** and **R²²** taken together form an optionally substituted non-aromatic heterocyclic ring;

A is selected from:

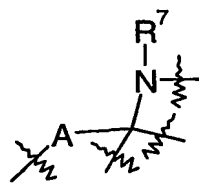
- 30 (i) a direct bond;
- (ii) optionally-substituted C₁₋₅alkylene wherein the optional substituents are independently selected from: optionally-substituted C₁₋₆alkyl
optionally-substituted aryl or optionally substituted arylC₁₋₆alkyl;
- (iii) a carbocyclic ring of 3-7 atoms;

- 201 -

- (iv) a carbonyl group or $-C(O)-C(R^d R^d)-$, wherein R^d is independently selected from hydrogen and C_{1-2} alkyl;

or when R^3 is a group of Formula (IIa) or (IIb), the group  forms a heterocyclic ring containing 3-7 carbon atoms and one or more heteroatoms;

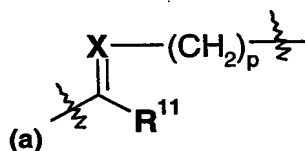
or when R^3 is a group of Formula (IIa), (IIb), (IIc) or (IId), the group



forms a heterocyclic ring containing 3-7 carbon atoms and one or more heteroatoms;

B is selected from:

- (i) a direct bond;
(ii) a group of Formula (IV)



Formula (IV)

wherein:

X is selected from N, CH or a saturated heterocyclic ring,

wherein at position (a) Formula (IV) is attached to the nitrogen atom and the $(CH_2)_p$ group is attached to R^8 ; and

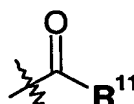
- (iii) a group independently selected from: optionally substituted C_{1-6} alkylene, optionally substituted C_{3-7} cycloalkyl, optionally substituted C_{3-6} alkenylene, optionally substituted C_{3-6} alkynyl, C_{1-6} alkoxy,

$(C_{1-5}alkyl)_{aa}-S(O_n)-(C_{1-5}alkyl)_{bb}-$, $(C_{1-5}alkyl)_{aa}-O-(C_{1-5}alkyl)_{bb}-$ or $(C_{1-5}alkyl)_{aa}-N(R^{15})-(C_{1-5}alkyl)_{bb}$,

wherein R^{15} and the $(C_{1-5}alkyl)_{aa}$ or $(C_{1-5}alkyl)_{bb}$ chain can be joined to form a ring;

or the group $-B-R^8$ represents a group of Formula (V)

- 202 -



Formula (V);

or the group together forms an optionally substituted heterocyclic ring containing 4-7 carbon atoms;

5 or the group forms a heterocyclic ring containing 3-7 carbon atoms and one or more heteroatoms;

E is $-\text{O}-$, $-\text{S}(\text{O}_n)-$, $-\text{C}(\text{O})-$, $-\text{NR}^{15}-$ or $-\text{C}(\text{R}^9\text{R}^{10})_q-$;

F is $-\text{E}(\text{CH}_2)_r-$ or $-(\text{CH}_2)_r\text{E}-$;

10 **G** is selected from: hydrogen, halo, CN, NO_2 , N, O, $\text{S}(\text{O}_n)$, $\text{C}(\text{O})$, $\text{C}(\text{R}^9\text{R}^{10})_t$, optionally substituted C_{2-6} alkenylene, optionally substituted C_{2-6} alkynylene, optionally substituted heterocyclyl or a direct bond to R^{18} ,

J is a group of the formula: $-(\text{CH}_2)_s-\text{L}-(\text{CH}_2)_s-$ wherein when s is greater than 0, the alkylene group is optionally substituted,

15 or the group together forms an optionally substituted heterocyclic ring containing 4-7 carbon atoms;

K is selected from: a direct bond, $-(\text{CH}_2)_{s1}-$, $-(\text{CH}_2)_{s2}-\text{O}-(\text{CH}_2)_{s-}$,
 $-(\text{CH}_2)_{s1}\text{C}(\text{O})-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}\text{S}(\text{O}_n)-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}\text{N}(\text{R}^{18})-(\text{CH}_2)_{s2}-$,
 $-(\text{CH}_2)_{s1}\text{C}(\text{O})\text{N}(\text{R}^9)-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}\text{N}(\text{R}^9)\text{C}(\text{O})-(\text{CH}_2)_{s2}-$,
 $-(\text{CH}_2)_{s1}\text{N}(\text{R}^9)\text{C}(\text{O})\text{N}(\text{R}^9)-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}\text{OC}(\text{O})-(\text{CH}_2)_{s2}-$,
 20 $-(\text{CH}_2)_{s1}\text{C}(\text{O})\text{O}-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}\text{N}(\text{R}^9)\text{C}(\text{O})\text{O}-(\text{CH}_2)_{s2}-$,
 $-(\text{CH}_2)_{s1}\text{OC}(\text{O})\text{N}(\text{R}^9)-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}\text{OS}(\text{O}_n)-(\text{CH}_2)_{s-}$,
 $-(\text{CH}_2)_{s1}\text{S}(\text{O}_n)-\text{O}-(\text{CH}_2)_{s2}-$, $-(\text{CH}_2)_{s1}\text{S}(\text{O})_2\text{N}(\text{R}^9)-(\text{CH}_2)_{s2}-$, or
 $-(\text{CH}_2)_{s1}\text{N}(\text{R}^9)\text{S}(\text{O})_2-(\text{CH}_2)_{s2}-$; wherein the $-(\text{CH}_2)_{s1}-$ and $-(\text{CH}_2)_{s2}-$ groups are independently optionally substituted by hydroxy or C_{1-4} alkyl;

25 **L** is selected from optionally substituted aryl or optionally substituted heterocyclyl;

- 203 -

m is an integer from 0 to 4;

n is an integer from 0 to 2;

p is an integer from 0 to 4;

q is an integer from 0 to 4;

5 **r** is an integer from 0 to 4;

s is an integer from 0 to 4;

s1 and **s2** are independently selected from an integer from 0 to 4, and

s1+s2 is less than or equal to 4; and

t is an integer from 0 to 4;

10 **aa** and **bb** are independently selected from 0 or 1

cc is an integer between 0 to 2;

with the proviso that

(i) when **G** is hydrogen, halo, CN or NO₂ then **R**¹⁷ and **R**¹⁸ are both absent;

15 (ii) when **G** is O, S(O_n), C(O) or C(**R**¹¹**R**¹²)_t then **G** is substituted by a single group independently selected from the definition of **R**¹⁷ or **R**¹⁸ and when **G** is a direct bond to **R**¹⁸ then **G** is substituted by a single group selected from **R**¹⁸; and

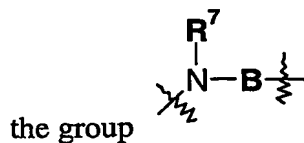
(iii) when **R**³ is a group of Formula (IIb), **B** is a group of Formula (IV), **R**⁸ is selected from group (i) or (ii) above, **R**¹¹ is a group of the formula N(**R**¹⁰**R**¹¹) and **R**¹, **R**² and **R**⁵ are as defined above then **R**⁴ cannot be hydrogen;

20 or a salt, pro-drug or solvate thereof.

2. A compound according to Claim 1 wherein **R**¹ is hydrogen.

3. A compound according to Claim 1 or Claim 2 wherein **R**³ is selected from a group of
25 Formula (IIa) or Formula (IIb).

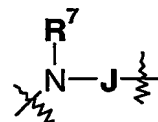
4. A compound according to Claim 3 wherein **B** is optionally substituted C₁₋₆alkylene or



forms an optionally substituted C₅₋₇heterocyclic ring.

30 5. A compound according to Claim 1 or Claim 2 wherein **R**³ is selected from a group of Formula (IIc) or Formula (IId).

- 204 -



6. A compound according to Claim 5 wherein the group together forms an optionally substituted heterocyclic ring containing 4-7 carbons atoms

- 5 7. A compound according to Claim 6 wherein **K** is selected from: $-(CH_2)_s-$, $-(CH_2)_s-O-(CH_2)_s-$, $-(CH_2)_s-C(O)-(CH_2)_s-$, $-(CH_2)_s-N(R^{18})-(CH_2)_s-$, $-(CH_2)_s-C(O)N(R^{18})-(CH_2)_s-$, $-(CH_2)_s-N(R^{18})C(O)-(CH_2)_s-$, $-(CH_2)_s-S(O)_2N(R^{18})-(CH_2)_s-$, or $-(CH_2)_s-NHS(O)_2-(CH_2)_s-$.

- 10 8. A compound according to any one of Claims 3, 4, 5, 6 or 7 wherein **R**⁸ is selected from

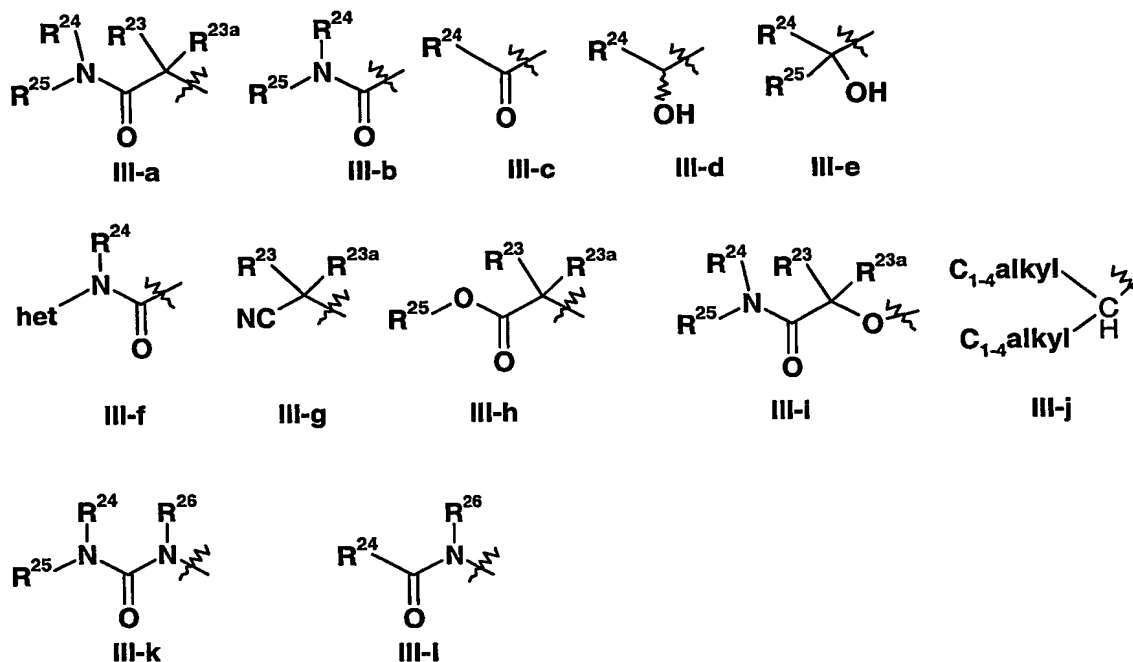
- (i) hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, halo C_{1-6} alkyl, hydroxy, cyano, C_{1-6} alkyl $S(O)_n-$, $-O-R^b$, C_{1-4} alkoxy C_{1-4} alkyl, $-C(O)-R^b$, $C(O)O-R^b$, $-NH-C(O)-R^b$, N,N -di- C_{1-4} alkylamino, $-S(O)_nNR^bR^c$

- 15 where **R**^b and **R**^c are independently selected from hydrogen and C_{1-6} alkyl, and **n** is 0, 1 or 2;

- (ii) $-(Q)$ -aryl;
 (iii) C_{4-7} heterocyclyl, or
 (iv) C_{3-7} carbocyclyl;

- 205 -

9. A compound according to any one of the preceding claims wherein R^5 is a group of Formula (III) wherein the group of Formula (III) is selected from one of **III-a** to **III-l**;



wherein:

- 5 **het** represents an optionally substituted 3- to 8- membered heterocyclic ring containing from 1 to 4 heteroatoms independently selected from O, N and S;
- R^{23} and R^{23a} are independently selected from hydrogen, fluoro or optionally substituted C_{1-8} alkyl; or R^{23} and R^{23a} together with the carbon to which they are attached form an optionally substituted 3 to 7-membered cycloalkyl ring
- 10 R^{24} is selected from hydrogen, optionally substituted C_{1-8} alkyl, optionally substituted aryl, $-R^d$ -Ar, where R^d represents C_{1-8} alkylene and Ar represents optionally substituted aryl, and optionally substituted 3- to 8- membered heterocyclic ring optionally containing from 1 to 3 further heteroatoms independently selected from O, N and S;
- 15 R^{25} is selected from hydrogen; optionally substituted C_{1-8} alkyl and optionally substituted aryl;
- or where the group of Formula (III) represents a group of Formula **III-a** , **III-b** or **III-i**, then the group $NR^{24}(-R^{25})$ represents an optionally substituted 3- to 8-membered heterocyclic ring optionally containing from 1 to 3 further
- 20 heteroatoms independently selected from O, N and S;

- 206 -

or where the group of Formula (III) represents structure **III-e**, R^{24} and R^{25} together with the carbon to which they are attached represents an optionally substituted 3- to 8- membered heterocyclic ring optionally containing from 1 to 4 heteroatoms independently selected from O, N and S;

5 R^{26} is selected from hydrogen or C_{1-4} alkyl.

10. A compound according to any one of the preceding claims wherein R^2 is selected from an optionally substituted monocyclic aromatic ring structure wherein the optional substituents are selected from cyano, NR^eR^f , optionally substituted C_{1-8} alkyl, optionally substituted C_{1-8} alkoxy or halo wherein R^e and R^f are independently selected from hydrogen, C_{1-6} alkyl or aryl.

11. A compound selected from:

15 2-[2-(1,1-Dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)]-4-[1-oxo-2-methyl-2-{4-(1,1-dioxidotetrahydro-3-thienyl)piperazin-1-yl}ethyl]-5-(3,5-dimethylphenyl)-6*H*-thieno[2,3-*b*]pyrrole;

20 2-[2-(1,1-Dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)]-4-[2-{4-(pyrrolidin-1-ylcarbonylmethyl)piperazin-1-yl}ethyl]-5-(3,5-dimethylphenyl)-6*H*-thieno[2,3-*b*]pyrrole;

25 2-[2-(1,1-Dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)]-4-[2-{4-(2,4-dioxo-1,2,3,4-tetrahydropyrimidin-6-ylmethyl)piperazin-1-yl}ethyl]-5-(3,5-dimethylphenyl)-6*H*-thieno[2,3-*b*]pyrrole;

2-[2-(1,1-Dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)]-4-[2-(4-{3-hydroxypyrrolidin-1-ylcarbonyl}piperidin-1-yl)ethyl]-5-(3,5-dimethylphenyl)-6*H*-thieno[2,3-*b*]pyrrole;

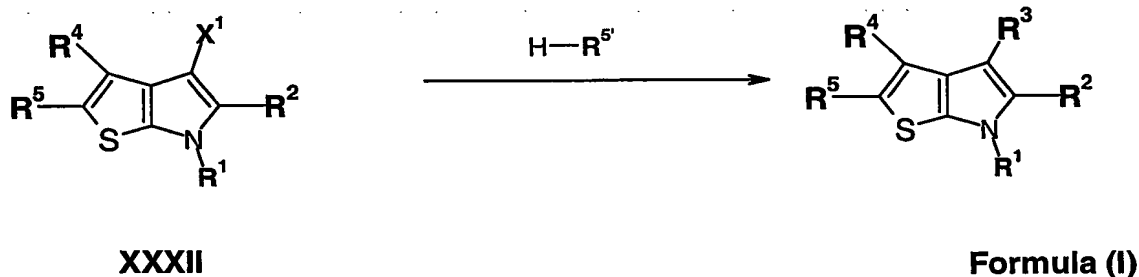
30 2-[2-(1,1-Dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)]-4-[2-(4-{3-oxo-3-pyrrolidin-1-ylprop-2-yl}piperazin-1-yl)ethyl]-5-(3,5-dimethylphenyl)-6*H*-thieno[2,3-*b*]pyrrole; and

2-[2-(1,1-Dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)]-4-[2-(4-{morpholinocarbonyl}piperidin-1-yl)ethyl]-5-(3,5-dimethylphenyl)-6*H*-thieno[2,3-*b*]pyrrole;

or a salt, pro-drug or solvate thereof.

- 207 -

12. A compound, or salt, pro-drug or solvate thereof, according to any one of Claims 1 to 11 for use as a medicament.
13. A pharmaceutical formulation comprising a compound, or salt, pro-drug or solvate thereof, according to any one of Claims 1 to 11 and a pharmaceutically acceptable diluent or carrier.
14. Use of a compound, or salt, pro-drug or solvate thereof, according to any one of Claims 1 to 11, in the manufacture of a medicament for administration to a patient, for therapeutically treating and/or preventing a sex hormone related condition in the patient.
15. A process of producing a compound, or salt, pro-drug or solvate thereof, according to any one of Claims 1 to 11, wherein the process comprises a reaction step selected from any one of (a) to (i):-
- (a) Reaction of a compound of formula XXXII with a compound of formula $H-R^{5'}$ to form a compound of Formula (I),



wherein X^1 is selected from:

$$\begin{array}{c} R^{6a} \quad R^{6a} \\ | \quad | \\ C \\ | \\ A \end{array} \quad \text{and} \quad \begin{array}{c} R^{6a} \quad R^{6a} \\ | \quad | \\ C \\ | \\ A-L^1 \end{array}$$

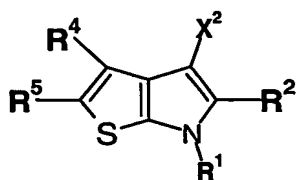
; L^1 is a displaceable group; and

$H-R^{5'}$ is selected from:

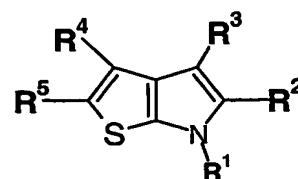
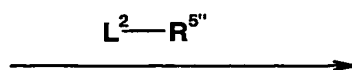
$$\begin{array}{c} R^7 \\ | \\ H-N-B-R^8 \end{array}, \quad \begin{array}{c} R^7 \\ | \\ H-N-J-K-R^8 \end{array} \quad \text{and} \quad \begin{array}{c} R^{22} \\ | \\ H-N-R^{21} \end{array};$$

- (b) Reaction of a compound of formula XXXIII with a compound of formula $L^2-R^{5''}$ to form a compound of Formula (I),

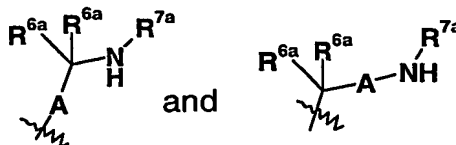
- 208 -



XXXIII



Formula (I)



wherein X^2 is selected from:

from the definition of R^7 or R^{22} above, and

5 $L^2-R^{5''}$ is selected from: L^2-B-R^8 , $L^2-J-K-R^8$ and L^2-R^{21} ;

(c) For compounds of Formula (I) wherein R^3 is a group of Formula (IIa), (IIb), (IIc) or (IId) and R^7 is other than part of a heterocyclic ring or hydrogen, reaction of a compound of Formula (I) wherein R^3 is a group of Formula (IIa), (IIb), (IIc) or (IId) and R^7 is hydrogen with a group of formula L^3-R^{7a} , wherein R^{7a} is as defined above for R^7 with the exclusion of hydrogen and L^3 is a displaceable group;

10

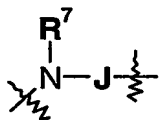
(d) For compounds of Formula (I) wherein R^3 is a group of Formula (IIe) or (IIf) and R^{21} is other than hydrogen, reaction of a compound of Formula (I) wherein R^3 is a group of Formula (IIe) or (IIf) and R^{21} is hydrogen with a group of formula L^4-R^{21a} , wherein R^{21a} is as defined above for R^{21} with the exclusion of hydrogen and L^4 is a displaceable group;

15

(e) For compounds of Formula (I) wherein R^3 is a group of Formula (IIe) or (IIf) and R^{22} is other than hydrogen, reaction of a compound of Formula (I) wherein R^3 is a group of Formula (IIe) or (IIf) and R^{22} is hydrogen with a group of formula L^5-R^{22a} , wherein R^{22a} is as defined above for R^{22} with the exclusion of hydrogen and L^5 is a displaceable group;

20

(f) For compounds of Formula (I) wherein R^3 is a group of Formula (IIc) or (IId) and

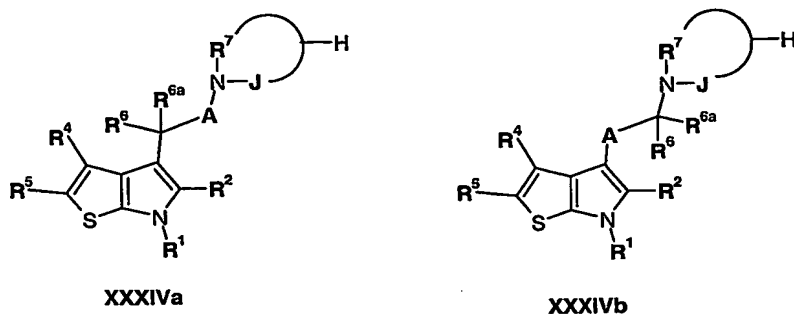


the group

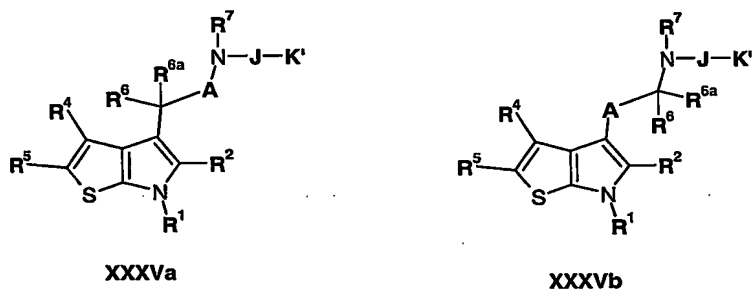
together forms an optionally substituted heterocyclic ring containing 4-7 carbons atoms, reaction of a compound of Formula XXXIVa or

- 209 -

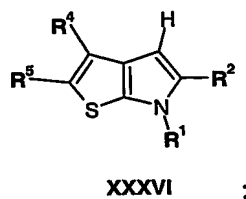
XXXIVb, with a compound of Formula **L⁶-K-R⁸**, wherein **L⁶** is a displaceable group



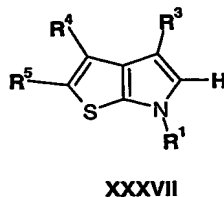
5 (g) For compounds of Formula (I) wherein R^3 is a group of Formula (IIc) or (IId),
reaction of a compound of Formula XXXVa or XXXVb, with a compound of
Formula $L^7-K''-R^8$, wherein L^7 is a displaceable group, and wherein the groups K'
and K'' comprise groups which when reacted together form K ,



10 (h) reaction of a compound of Formula XXXVI with an electrophilic compound of the formula L^8-R^5 , wherein L^8 is a displaceable group



(i) reaction of a compound of Formula XXXVII with a compound of the formula L^8-R^5 ,
wherein L^8 is a displaceable group



and thereafter if necessary:

i) converting a compound of the Formula (I) into another compound of the Formula (I);

- 210 -

- ii) removing any protecting groups;
- iii) forming a salt, pro-drug or solvate.